

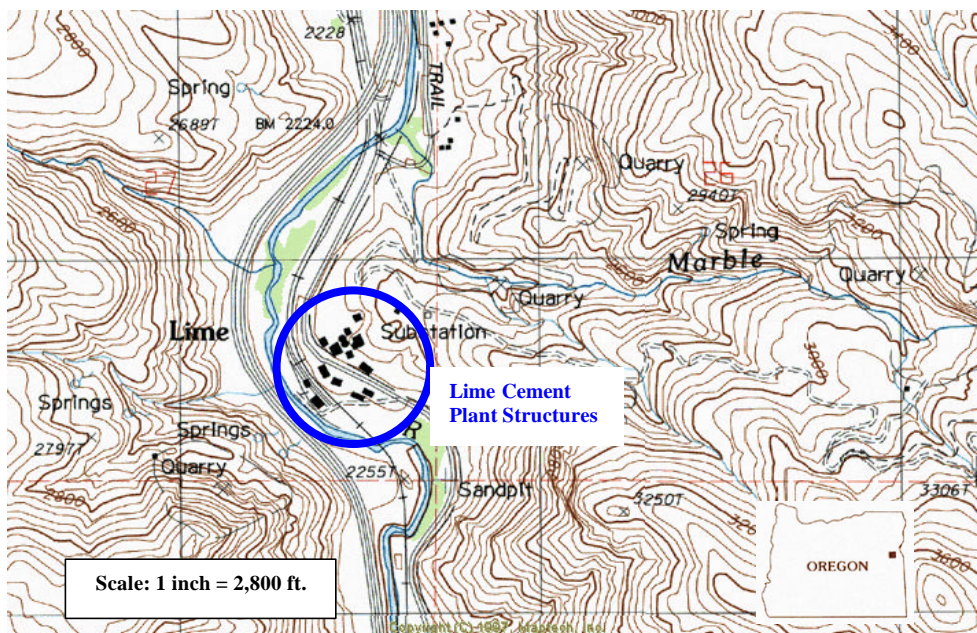
Targeted Brownfield Assessment Former Lime Cement Plant, Baker County, Oregon

Project Overview

The Oregon Department of Environmental Quality (DEQ) completed a Targeted Brownfield Assessment (TBA) at the 1,034-acre Former Lime Cement Plant near Huntington, Oregon in May 2001, under a Cooperative Agreement with EPA Region 10. The purpose of the TBA was to determine whether past operations had caused contamination that might prevent Baker County (the property owner) from making the land available for industrial redevelopment or from razing site buildings and developing the property as public greenspace. The map below shows the site's location in eastern Baker County.

Site Background

Sun Portland Cement Co. built the plant in the early 1920s to supply cement for the construction of Owyhee Dam, located in adjacent Malheur County. After the dam's completion in 1928, Sun sold the operation to Oregon Portland Cement Co., which was eventually absorbed by Ash Grove Cement. Plant activities included on-site and off-site mining; cement manufacturing; electrical and maintenance support (using on-site transformers); vehicle maintenance, fuel storage, and dispensing; process water collection/discharge; and on-site disposal of waste kiln dust, refractory solids, and other materials. The plant closed in 1980, and Baker County foreclosed on most of the property in 1999. (Ash Grove retained ownership of a 14-acre area comprising the waste piles of kiln dust, and has completed its own study there; the TBA excluded this portion of the property.)



In May 2000, the Baker Co. Board of Commissioners requested a TBA to investigate the possibility of site contamination from polychlorinated biphenyls (PCBs), petroleum, metals, and related compounds. The county had no funds to complete an investigation on its own, but wished to clean up and level the site to make the

property more amenable to redevelopment. Recently, the county had used a DEQ grant to remove large quantities of discarded tires from the site, and this positive interaction with DEQ encouraged county commissioners to request further assistance from DEQ and its TBA funding partner, Region 10 of the U. S. Environmental Protection Agency (EPA).

What We Did

EPA approved the TBA in June 2000, and DEQ developed a scope of work, based on concerns that the agency's staff had noted during site visits in February 2000. For example, oil from a pole-mounted transformer, thought likely to contain PCBs, had been dumped onto the ground. There also was stained soil, possibly from waste oil, in a small building adjacent to what may have been a vehicle repair shop. Several chemical drums were present in this area. In October 2000, DEQ collected 11 soil samples, 10 from the areas of concern noted above, and one from a background location. EPA laboratories analyzed all samples for volatile and semi-volatile organic compounds (VOCs/SVOCs), PCBs, and pesticides. Selected samples were also analyzed for metals.

What We Found

Low levels of VOCs were present in some samples, but at concentrations below EPA Region 9 Preliminary Remediation Goals (PRGs) for residential use. (*Residential* PRGs are considered the most conservative screening levels for evaluating specific contaminants in soil, while *industrial* PRGs are somewhat higher and therefore less conservative).

All samples contained SVOCs; several contained polynuclear aromatic hydrocarbons (PAHs) above residential or industrial PRGs. Petroleum levels ranged up to 5,955 mg/kg.

Four samples contained PCBs, at levels up to 3.7 mg/kg. Three of these samples exceeded residential PRGs, and two exceeded industrial PRGs. While pesticides were detected in two samples, their low levels did not appear to pose any risks to human health or the environment.

The only metal of initial concern was arsenic, since all six samples analyzed for metals contained this compound above the industrial PRG of 2.4 mg/kg. However, based on data from Ash Grove's separate investigation of the on-site kiln dust disposal area, DEQ concluded that the arsenic in the TBA samples represented naturally occurring levels of this metal, rather than contamination from past industrial activities.

Based on these results, DEQ determined that direct-contact and airborne exposures to soil at several locations on-site could threaten human health, but that there was negligible risk to groundwater or surface water. DEQ recommended that Baker County remove and properly dispose of impacted soil in the vicinity of four TBA sample locations, and work with Ash Grove to remove the small, residual piles of kiln dust and refractory brick that extend beyond Ash Grove's property boundaries.

The Next Steps

In pursuing possible industrial re-use (or greenspace development) of the site, Baker County has discussed applying for a Community Development Block Grant that would fund building demolition/removal and the remedial steps recommended in the TBA. The county may also negotiate with Ash Grove over some or all of these site cleanup issues, but in any event is motivated to remove the "eyesore" visible from the highway and continue pushing for site redevelopment.

For more information, please contact:

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